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ABSTRACT

Literature dealing with the effects of the television program "Sesame Street" on preschool children's learning and behavior is examined. The bulk of the paper consists of annotations which provide (1) background information on the program's evolution, goals and objectives, and format; (2) information on the effectiveness of the program on the learning and behavior of preschool children; and (3) negative evaluations of the program and overall evaluations of summative research. Among the conclusions it is suggested that "Sesame Street" has successfully adapted commercial television approaches and techniques to teaching the disadvantaged child and that educators and parents have become more aware of children's mental capacities. However, it is cautioned that no one style of television programming is best for all children. A summary and recommendations are also provided. (Author/JA)

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THE EFFECTS OF 'SESAME STREET' ON PRE-SCHOOL LEARNING AND BEHAVIOR

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INTRODUCTION

Children have loved to explore. By means of exploration children have acquired vast amounts of information and learned how to use it. Television has lead to this exploration and has allowed children to shape their interests and expand their experiences.

Television has been a constant companion to nearly all children. By the time children have become ready for school they will have logged some 9,000 hours of television viewing. This amounted to more time than was spent during the first fi e years of formal schooling. (Cooney:1970)

Many parents were concerned about the apparent passivity linked to television viewing. In fact, however, the child participated just as actively in what he/she saw on the screen as in other pursuits. The child was never completely passive to culture, and reacted selectively to it, and in various ways. (Garry:33)

Many programs have been designed to invite creativity and to stimulate children's response in mental and/or physical activities. Programs dealing with school participation, personal health, and ethical values all had a common purpose: orienting children to the world, what they could expect of it, and what was expected in turn. Programs that provided the opportunity to talk,

to sing, to clap and to imitate in response to what was happening on the screen offered children healthy means of self-expression. (Garry:34)

Sesame Street has been a children's program that set out to support the family and assist in the education of the pre-schooler. The producers of this program consulted, interviewed, researched and analyzed children in an attempt to understand how and why they learned. (Tierney:297)

Researchers felt that children were capable of receiving and storing information soon after birth. (Cooney:1970) Language growth has been rapid in the pre-school years and with it has come a hunger to use words and learn what they can do. The child has begun to develop a notion of different social values and roles and to understand that consistent differences in behavior were expected from each. (Garry:50)

The important task in the pre-school period has been to build confidence in the adult world, in parents and in family, and to conceive the world as having some order and dependability. Sesame Street has attempted to become a reinforcing agent in the pre-schooler's adjustment process to the world around him/her.

STATEMENT OF THE PROBLEM

Questions of if Sesame Street taught, what it taught, and how it taught pre-schoolers have been of concern to educators, parents, psychologists and sociologists since the conception of the series. These questions served as the basis for the organization of this study.

PURPOSE OF THE STUDY

The purpose of this study was to examine the extensive body of literature that dealt with the effect the program had on pre-school learning and behavior and to increase awareness in educators that television could be used as an effective educational tool.

ORGANIZATION OF THE STUDY

The first part of the study has provided background information and described program evolution, goals and objectives, and format.

In the second part of the study, positive impact studies as to the effectiveness on learning and behavior were discussed.

The last section of the study encompassed negative evaluations of the program and overall evaluations of summative research. Entries in each section were presented in chronological order.

DEFINITION OF TERMS

Alliteration - "The repetition of usual initial consonant sounds in two or more neighboring words or syllables." (Webster:23)

Formative Research - "Part of trial and revision process. It consists of taking partially completed materials out into the field and testing them, and then feeding the information from that testing into the continuing production process." (Cooney:1975)

Meta-Communication - "A new but related dicipline designed to deal critically with communication." (Webster:532)

Pro-Social - In favor of and acceptable to society; occurring during period before formal schooling as in preschool years.

Summative Research - "Assesses the extent to which the program has achieved its educational objectives, once aired. It consists of going out into the field and testing groups of viewing and non-viewing children to see what learning advantages there is as a result of viewing. Usually done by an independent testing organization. (Cooney:1975)

ANNOTATIONS

BACKGROUND INFORMATION

Evolution of Program

Palmer, Edward L., "Can Television Really Teach?" American Education 7:2-6, August/September, 1969.

Palmer stated in this article that pre-schoolers were probably the roughest television audience around. As of 1969, seven out of the 12 million pre-schoolers in the United States watched the program. Sesame Street represented an experiment that included several phases. The primary objective of the series was to determine whether the approaches and techniques that were so effective and popular in commercial television could be successfully adapted to teaching. This particular program was probably the most researched, most tested, and most studied program ever aired in history. The series got its name from the command given by Ali Baba of "Open Sesame".

"Sesame Street Asks: Can Television Really Teach?" Nation's Schools 85:58-59, February, 1970.

Sesame Street was the first major attempt to investigate and demonstrate that the tube had a potential for mass education, according to this article. A special goal was to serve as a kind of "Head Start" program at home. The producers of the program acted upon vast amounts of research on early learning that showed that two thirds of a youngster's intellect developed before formal schooling. The Educational Testing Service, among others, administered many tests and national samplings to day care centers, nurseries, and to children at home. Sing-song verse and appealing hosts added the warmth and continuity the audience needed. Television was a new broadcasting tool whether it was educating formally or not. The show taught such things as positive attitudes, self-esteem, a sense of belonging, fairness, manual skills, and nutrition.

Rogers, Janet M., "A Summary of the Literature on Sesame Street," Journal of Special Education 6:44-50, 1972.

In this article Rogers gave some background information on the beginnings of Sesame Street. The program began on November 10, 1969 and was shown on 130 non-commercial television stations across the United States. It was funded by the Carnegie Foundation, Ford and Markle Foundation, Operation Head Start, Corporation of Public Broadcasting, and the U.S. Office of Education. They provided a total of eight million dollars for the two year experimental series, with the federal government donating half of the total amount. The first year was spent on formative research and the second on broadcasting program hours. The primary objective was televised education. The producers had to make the show entertaining without compromising the instruction goals.

Program Goals and Objectives

Little, Stuart, "From A to Z on Sesame Street," Saturday Review 53:62-64, May 9, 1970.

After the first successful year, the Children's Television Workshop enlarged its educational goals. The producers felt that the only thing they had done wrong was to underestimate the intelligence of their viewers. Testimony as to the show's effectiveness began piling up from teachers and parents. It seemed that the show was encouraging a generation of quick learners. A major goal was to hurdle the geographic, ethnic, and poverty barriers and reach the deprived children in the inner cities. Tests were restricted to homes that had at least one pre-schooler, at least one television set, and an annual income of less than $5,000. The show began on a solid basis of research, fully tested material, and expert consultation and has proven itself a success. It won the George Foster Peabody Award for meritorious service to broadcasting in 1970 as the best children's show.

Tierney, Joan D., "The Miracle of Sesame Street," Phi Delta Kappan 52:296-298, January, 1971.

The Children's Television Workshop interviewed, researched, and analyzed children in an effort to understand how and why they learned. The research period uncovered what they already knew, help determine how much they could learn in an alloted time, and how long their attention could be held. Target audiences were pre-schoolers from low income inner cities, ages three to five. The pretests resulted in: cartoons preferred to live talent, children preferred to adults, sudden noises and rhythm were great attention getters. Achievement and understanding was also measured. It was learned that children learn words better if they were presented at the end of a rhymed couplet, repeated four times, were properly spaced in a sequence, and the shorter and catchier, the better. There was also a greater knowledge of numbers over letters. The formula was pretest, posttest, modification en route, and in-depth learner analysis.

"U.S. Grant to Sesame Street," School and Society 99:140, March, 1971

In this article a statement from the U.S. Acting Commisioner of Education (Bell) declared the the nation now had the results of a recent national evaluation which told that children have learned from the series. The Commission was impressed with the fact that such television could reduce the distinct educational gap that usually separated advantaged children from disadvantaged children by the time they entered school. In its second season, Sesame Street included Spanish and Black cultural lifestyles. They also wanted to help many Kindergarten and First Grade children maintain the learning gains from the first shows. Model viewing centers were set up across the country to reach those inner city children who did not have access to a television set.

Best, Tony, "On the Other Side of Sesame Street," American Education 10:6-10, May, 1974

Best reviewed the learning stations set up by the Children's Television Workshop in this article. Before Sesame Street ever aired, the producers hired people to spread the word about the show to urban ghettos. They reasoned that the poor child (the central figure of the purpose of the series) had little experience with educational television (excluding cartoons, not considered education). The community spirit was a target for development. It involved parental and volunteer interaction to translate the electronic data. The program was brought to the Applician communities in an effort to teach some pre-reading skills to parents as well as children. As of 1974, Sesame Street had a total viewing audience unmatched by public television.

Cooney, Joan Ganz, Sesame Street at Five: The Changing Look of a Perpetual Experiment, Educational Resources Information Center, ED 122 804, Children's Television Workshop, New York, October, 1974, 125 pp.

The goals of the program have changed in look, mood and content over the years to include affective goals which related to helping a child learn to cope with obstacles, failure, and to take part in social groups. The rather frentic pace had been moved to one which was softer and gentler in tone and had a more relaxing effect. A number of studies have confirmed that the show had the ability to attract and teach to large audiences of adults and children alike. Research has been an integral part of the program planning and has concentrated in recent years on the specific needs of bilingual children. Director Cooney stated that the goals and content have changed in response to needs and reactions of the audience. It incorporated more diverse characters and conflicts, more child-adult interaction, and less concentration on right answers. The show had won more than 100 awards, including eight emmys.

Cooney, Joan Ganz, "Tapping Its Potential: Educational Television," Compact 12:10-11, Summer/Fall, 1978.

Cooney stated that television had evolved into the most pervasive medium in our culture, especially among youngsters. Pre-school children spend more than one third of their waking hours in front of the screen. Goals have expanded still more over the past ten years. To a great extent, the program had followed the lead of the U.S. Education Commission of States. Priorities of both include: minimal competency, bilingual, handicapped, career, and Indian education. From the start, the program was designed to supplement, not replace the school. Formative research was conducted to guide the production staff in striking the right balance of content, appeal and motivation. The hugh audience (eight million) and cost-effectiveness factors of the program were indexes of its total effectiveness. It costs about one cent per child per show and Dr. Spock felt that it was a bargain at any price. Cooney felt that television could be used to educate the present generation and enlighten the next.

Program Format

"The Children's Hour," Newsweek 74:9, December, 1969.

The producers of the program hoped to marry education and entertainment. They used celebrities in part to induce mothers to watch the program with their children. It seemed that children learned more from the program when they watched it and discussed it with their mothers. To make entertainment out of basic learning skills, the show used spot commercials, "This program was brought to you by the letter F and the number five." It was presented in a magazine type formate borrowed from 'Laugh'In' and 'The Three Stooges'. This type of format allowed for an enormous amount of flexibility and permitted segments to be dropped, modified or added with ease. Guest appearances and a crowd of zany, oddly colored hand puppets have helped elevate this program to instant success. After one month on the air, Nielsen ratings polled it as being seen in 1.9 million homes.

Baer, Betty, "The Secrets of Sesame Street," Look 34:56-62, September 22, 1970.

The Children's Television Workshop's first impact studies on 130 children ages three to five showed substantial increases in abilities with numbers, letters. and problem solving. The show has been called a well-staged Montessori program. Jokes are aimed over preschoolers heads to attract older siblings. The program has had the mind of a four year old, and that was why it worked. Kids loved Big Bird, he made mistakes, cannot reason or grasp logic or even think straight. He took advice and criticism, was open-minded, innocent and willing to learn. Adults adored Oscar - he was rude, lacked community spirit, was close-minded, selfish, needed no friends, liked bad weather and toothaches. Kermit was always preaching, Cookie Monster always ate props and Ernie constantly bugged Bert. These puppets with human characteristics all helped in the success story of Sesame Street.

Palmer, Edward L., "Sesame Street: Shaping Broadcast Television to Needs of the Pre-schooler," Educational Technology 11:18-22, February, 1971.

Palmer stated that television could be a flexible and responsive medium. Variety was the key tecnique to capturing and maintaining the attention of children. Palmer said that it was highly significant from the research point of view that the producers removed a section of the show if it failed to work and still maintained the integrity of the show as a whole. Format was used as a teaching tool. It was non-competitive and non-punitive and a child dealt with the show at his/her own level of ability. Children could not flunk Sesame Street. The show's optimum research efforts were directed toward finding the link between a child's needs and perferences and the show's instructional goals. The program tended to immerse the child in the written form of language much the same way he/she was immersed in spoken language. The program provided for the gradual introduction of the language in its written form in a context that was non-threatening, lignt and entertaining.

Hayward, Ruth Ann, "Reaching Children Where They Live," Instructor 80:58-59, February, 1971.

This article described how the program producers employed educational practices that brought results. The program has used skits, short films, songs, games, puppets, dances, story-telling and visiting techniques. It has provided the child with a constant - something that he/she could look forward to everyday. The show reinforced concepts of cooperation, made good use of humor, rhyming sounds, alliteration, nonsense verse and other forms of word play. It integrated these concepts in many ways. The producers were not ashamed to admit that they have borrowed, lifted, and even stolen commercial techniques. They reasoned that if those techniques could seel cereal and toys that they certainly be put to work to teach some basic cognitive skills. The underlying message of Sesame Street was that its viewers were unique. This author suggested that some of these ideas be adopted for classroom use.

Lesser, Gerald S., "The Experience of Sesame Street," Harvard Educational Review 42:232-237, May, 1972.

Lesser gave some background information on the puppet characters that appeared on the program in this piece. "No program for children ever worked effectively if the characters shown are not appealing and do not portray a variety of distinctive and reliable personalities," stated Lesser. The range of personalities among the several puppets (from Henson's repertory company of 'muppet' puppets) perhaps best illustrate this necessary diversity. The puppets have generally remained reliable in character across different episodes and could portray more exagerated and therefore clearer roles and function than human figures. Developing television materials for children and then observing responses to them has been full of mysteries and surprises for the program's researchers and producers.

Mielke, Keith W., and Bryant, Jennings, Jr., Formative Research in Comprehension of Children's Television Workshop's Programs: A Series of Proposals, Educational Resources Information Center, ED 126 868, Children's Television Workshop, New York, June 30, 1972, 13 pp.

A report of children's comprehension of the Children's Television Workshop shows was given in this paper. Comprehensibility of the programs was measured by 1) comprehension tests inserted into the program format, 2) dual audio testing (inserts of comprehension questions into the regular audio track of the program), and 3) program interruptions that permitted comprehension demonstration in play or game situations. In some other methods used, the children indicated when learning occurred by telling when they had found an answer to a question that was asked before the program began.

Lesser, Gerald S., Children and Television, Random House, Incorporated, New York, New York, 1974, 278 pp.

This book described how Sesame Street was created, developed, and implemented. Attention was focused on the concept of using a team of educational advisors, professional researchers and television producers and specialists to blend the technology of television and the art of entertainment with specific pedogical aims. These aims included 1) symbolic representation (letters, numbers, geometric forms), 2) cognitive processes (perceptual discrimination, relationships, classification and ordering), 3) reasoning and problem solving, and 4) the child and his/her world - concepts of self, social units, social interactions and the man-made and natural environment.

Bryant, Jennings, Hezel, Richard and Others, "Humor in Children's Educational Television." Communication Education 28:49-59, January, 1979.

This investigation was designed to determine how humor and attention-getting devices were employed by producers of children's television. The analysis included assessment of the proportion of each program devoted to formal education, information education, and pro-social material. Data showed that Sesame Street devoted 29 percent of its material to pro-social material, 18 percent to formal education, and 38 percent to informal education. It presented the greatest balance (compared to three other programs studied) in terms of porportional material devoted to various areas of instruction. Almost nothing was known about how effective humor really was as a stimulation to learning or about how to employ humor most effectively in educational television.

PROGRAM EFFECTIVENESS

Impact on Learning

Children's Television Workshop's Report of Research on Five Test Shows, Educational Resources Information Center, ED 126 859, Children's Television Workshop, New York, September 24, 1969, 145 pp.

This report gave the results of tests that took place in New York City and Philadelphia on disadvantaged and middle income children, who were four years old. They were tested on areas of recognition and classification of body parts, numbers, letters and geometric forms. Results showed that those children who had viewed Sesame Street experienced: 1) positive gains dependent of background characteristics, 2) displayed high visual attention, and 3) increased level of interest brought about by production techniques.

Cooney, Joan Ganz, "Sesame Street," PTA Magazine 64:25-26, March, 1970.

Cooney and other producers of the program felt that children's young minds were hungry for information and that they were capable of receiving it and storing it in large doses soon after birth. Children latched onto the 'electronic tube' for their main source of nourishment. There was no doubt in this author's mind that the pre-school child was learning constantly from television. Teachers should make this versatile medium their ally. Statistics showed that pre-schoolers have logged more than 9,000 hours of viewing before enrolling in formal schooling. This amounted to more time than was spent in the first five years of school. Specialists in childhood education believe that education should begin long before age five or six. The lower income children often enter school as much as a year behind their middle classed peers. Cooney stated that most homes (at least 95 percent) have at least one television set.

"T.V's Switched-On School," Newsweek 75:68-69, June 1, 1970.

The idea of pre-school education was not new. Since 1965 the federal government has spent more than four million dollars on this endeavor. Sesame Street imparted social values ranging from the Golden Rule to racial integration. Tests in Maine, New York and Tennessee on 130 pre-schoolers after six weeks of viewing the program showed gains in ability to group and separate objects according to configuration at 26 percent for viewers compared to three percent for non-viewers. Some critics have said that the show had actually widened the gap between the lower socio-economic groups and middle class groups because the middle class members were much better prepared to use the information they received. The show had, however, still raised the lower group above literacy level.

Miller, Jack, and Skvarvus, Jack, Does Sesame Street Teach? Educational Resources Information Center ED 122 809 Children's Television Workshop, New York, October, 1970, 167 pp.

Tests were conducted on 200 randomly selected pre-schoolers over a three month period to determine the benefits derived from viewing Sesame Street. Data revealed that lower socio-economic children tended as a group to score lower on standardized academic measures and to respond less favorably to instruction than middle class children. After three months of viewing the program, the lower group made gains placing them near the mean of all viewers. Girls were much better on the pretest and only slightly higher on the posttest. It was concluded that the program was just as beneficial for both sexes. No overall differences were found based on age. The program did not retard thh progress of high ability children and significantly enhanced intellectual development of average and below average children. Despite research difficulties on children too young to read or write, the results favored Sesame Street.

Bogatz, Gerry Ann, and Ball, Samuel, A Summary of the Major Findings in the First Year of Sesame Street: An Evaluation, Educational Resources Information Center, ED 122 799, Children's Television Workshop, New York, October, 1970, 33 pp.

Bogatz and Ball reported that tests performed on 943 children aged three to five years from five test sites (mostly ghetto) showed that: 1) disadvantaged children who watched the program a great deal surpassed the middle class children who watched the program infrequently in academic gains, 2) the children who watched the program most, learned the most (this held true across age, sex, geographical locations, socio-economic status, viewing location and mental age), 3) the younger the age group, the greater the gains, with three year olds making the greatest gains. Skills were improved as much as 62 percent in some cases.

Rosenthal, Alan, "The Sesame Street Generation Arrives," Today's Health 48,42-45, December, 1970.

Sesame Street had the impact of an intellectual nuclear bomb, according to Rosenthal. Two facts became clear: 1) television used properly in the modern age could be a most powerful and effective purveyor of information and, 2) learning could be fun. The show's producers hoped that the program would cause teachers to take a second look at whay they were doing. The producers felt that teaching techniques should be brought up to date. Most educators acknowledged that youngsters who watched the program displayed increased knowledge and understanding, but more important, they seemed to improve their ability to learn. The producers wanted to present information in a way that caused children to want more information. The show had also helped change the ideas of parents, psychologists, and teachers on mental abilities of children. It had spurred new thinking on what and how to teach. Children improved attitudes toward learning and attention to teaching. They learned to sit and listen for the first time!

"If Kids Act Smarter, Sesame Street May Be the Reason," Nation's Schools 87:34-35, March, 1971

This article stated that the effects of the show were being felt in the nation's schoolrooms. Surveys showed that more children were coming to school already knowing letters, numbers, parts of the body and geometric forms. They seemed to be more much aware of the things around them. They seemed more advanced and more mature, had a different attitude about school, as if they already learned what it was for and what to do there. In this survey, taken at ten major schools, three out of every four teachers interviewed said that the show had made a difference in the amount of demonstated mastery of rudimentary skills. They were ranked according to general readiness for school, verbal ability, intelligence, coordination, attitude toward school and relationship with peers. In all cases, children who viewed Sesame Street the most ranked higher than average. The show had a highly creative and lively approach to learning that worked.

Bogatz, Gerry Ann, and Ball, Samuel, "Youv'e Wanted to Know About Sesame Street," American Education 7:9-15, April, 1971.

The evaluation of the program by the Educational Testing Service was one of the most extensive and intensive evaluations ever undertaken of an educational program. After extensive analyses of the data obtained during the first six months of the show, several generalizations could be accurately made. Sesame Street had shown that television could be an effective medium for teaching children important simple facts and skills and complex cognitive skills. These skills were taught primarily through the use of animation and puppets. Second years goals were expanded to include sight vocabulary, addition, subtraction, and multiplication classification. The evaluation dealt with such side effects as children's attitudes toward school activities and the effects of parent-child interaction on learning.

Bogatz, Gerry Ann, and Ball, Samuel, The Second Year of Sesame Street: A Continuing Evaluation, Educational Resources Information Center, ED 122 800, Children's Television Workshop, New York, November, 1971, 310 pp.

Sesame Street was the first show ever to attempt to educate an entire population through the television media in guise of an extremely entertaining package. Studies in Winston-Salem, North Carolina, Los Angeles, and California divided children into encouraged to watch groupsand not encouraged to watch groups. It was found that the encouraged groups who viewed the program more learned more of the readiness skills presented on the program, but that learning gains did not depend on encouragement. (Encouraged and non-encouraged groups did not differ on pretests.) Follow-up studies in Boston, Durham and Phoenix showed that after a period of two years of viewing, skills in learning more complex things improved. Those who had viewed for only one year and then entered school were found to have more positive attitudes toward school and other races.

Bogatz, Gerry Ann, and Ball, Samuel, The Impact of Sesame Street on Children's First School Experiences, Educational Resources Information Center, ED 124 103, Children's Television Workshop, New York, July, 1972, 16 pp.

Bogatz and Ball tested 99 three and four year olds from low income neighborhoods in Los Angeles in this study. The children who watched the program on a regular basis showed slightly accelerated levels of achievement (nothing significant) over those children who did not watch the program on a regular basis. The difference in viewing time between the two control groups was less than in previous tests of this nature. Surveyed teacher evaluations revealed that Sesame Street viewers did perform well on all school readiness factors.

A Report of Three Studies on the Role of Penetration of Sesame Street in Ghetto Communities (Bedford Stuyvesant, East Harlem and Washington, D.C.) Educational Resources Information Center ED 122 821, Children's Television Workshop, New York, April, 1973, 81 pp.

These studies were designed to establish a reliable reading on the penetration of Sesame Street in low income areas and to determine if the program was achieving its prime objective. Results of a 1970 survey showed that it had serviced pre-school ghetto children. Penetration was 78 percent in East Harlem, and 91 percent in Bedford Stuyvesant. In Washington, D.C., the subjects showed extraordinary performance also, but viewing was limited to only one UHF channel. A follow-up study was completed in 1971 to compare the results of the previous year. The success was demonstrated by a continued audience growth, high frequency of viewing, and a recognition by ghetto mothers of the program's effects. In a third follow-up in 1973, Sesame Street had become an institution among ghetto children with penetration and viewing audience growing every year.

Lasker, Harry, Status of Comprehension Study of Sesame Street Affect Bits, Educational Resources Information Center, ED 122 826, Children's Television Workshop, New York, January 22, 1974, 18 pp.

This pilot study was conducted in a New York day care center to measure comprehension of affective bits of Sesame Street on children ages three to five. The subjects were shown bits related to anger and pride and then asked questions regarding those bits. Results showed that affective messages can be comprehended by children as young as three years old but there was significant difference in comprehension between anger and pride. Sesame Street target children (disadvantaged) preferred cooperation and anger over fear and pride. Middle class children gave greater attention to pride and less to anger.

Minton, J. H., "The Impact of Sesame Street on Reading Readiness of Kindergarten Children," Sociology of Education 48:141-151, 1975.

In this study, Minton used the Metropolitan Readiness Test to compare whether children in 1970 who had been exposed to the program scored better than their predecesors in 1969 who had not. Minton demonstrated that the 1970 child out-performed the 1968-1969 child on the Alphabet subtest, but on no other subtest. It was concluded, therefore, that after the first season Sesame Street had taught children some letter related skills. In this study, however, the amount of viewing time was not considered, so the effect of viewing time may have been underestimated. It must also be remembered that scores on a test like this were merely indicators of learning or potential to learn.

Impact on Behavior

Sproule, Natalie, "Visual Attention, Modeling Behaviors and Other Verbal and Non-Verbal Meta-Communication of Pre-Kindergarten Children Viewing Sesame Street," American Education Research Journal 10:101-114, Spring, 1973.

Sproule tested 30 pre-kindergarten children in this report. They were randomly assigned and taped watching the same group of Sesame Street programs. Groups and single viewers were included. They all averaged eye contact over 80 percent of the program despite exhibiting high mobility while viewing and more than one non-viewing behavior per minute. Participation was evidenced by one direct reaction to the program about every four minutes. Other behaviors included program appeal behaviors, labeling, associating, evaluation, fear references, reading, predicting, and non-program related verbalization. The much discussed power of television, particularly Sesame Street, to hold its audience was supported by these tests. It also showed that children imitate selectively, and were anything but, passive viewers.

Paulson, F. Leon, "Teaching Cooperation on Television, An Evaluation of Sesame Street's Social Goals Programs," AV Communication Review 22:229-246, Fall, 1974.

Since its beginning, Sesame Street has been concerned with fostering social and cognitive goals. During the third season, the show's producers made a major effort to evaluate the impact of social goal programs as well as the cognitive ones. They chose cooperation because it was a valuable group endeavor and a 'universal goal'. Tests were conducted to evaluate how well the programs taught children to cooperate. Results revealed that children who watched the programs learned to cooperate more than the children who did not. Television could influence immediate behavior of children and a pro-social example shown on the screen, could, in some circumstances, increase a child's willingness to carry out a helping behavior. Sesame Street has taken an important step in the direction of bringing about positive social behavior.

Coates, Brian and Pusser, H. Ellison, "Positive Reinforcement and Punishment on Sesame Street and Mr. Rogers," Journal of Broadcasting 19:143-145, Spring, 1975.

In this study, Coates and Pusser attempted to discover the effects of television on children's behavior. In a survey of more than 25,000 children, Sesame Street was found to be the most popular children's program. Positive reinforcement and punishment were measures in the test. Both programs were found primarily consistent of adult and fantasy characters giving positive reinforcement for social behaviors. On Sesame Street there was more positive reinforcement given for social behavior than for cognitive behavior, even though cognitive development was its major goal. It also contained more positive reinforcement and punishment for cognitive behavior when compared to Mr. Rogers, but punishment was scored as hurting but not seriously injuring. (The program was designed to be humorous and was presented in a slapstick manner, thereby displaying punishment.)

Fredrich, K., And Stein, A.H., "Pro-Social Television and Young Children: The Effects of Verbal Labeling and Role Playing on Learning and Behavior," Child Development 46:27-38, March, 1975.

Friedrich and Stein assessed 73 Kindergarten children on the effects of pro-social television alone and in combination with training-verbal labeling and role playing on learning and helping behavior. The results provided support for the prediction that children learn the pro-social content of television programs and generalize that learning to other situations. Support was found for the prediction that training enhances verbal learning and affects actual helping behavior. The verbal labeling had the greatest impact on the verbal measures of learning particularly non-verbal helping behavior. These studies indicated that children imitate altruism, helping, delay of gratification and high standards of performance when they are exposed to models that exhibit these behaviors. Long term effects have only been briefly touched upon.

Shapiro, Bernadette N., Comprehension of Television Programming Designed to Encourage Socially Valued Behavior in Children: Formative Research on Sesame Street Programming with Social and Affective Goals, Educational Resources Information Center, ED 122 863, Children's Television Workshop, New York, September 22, 1975, 228 pp.

Shapiro tested children on such questions dealing with: 1) entering social groups, 2) coping with failure, 3) coping with basic emotions, and 4) sex role stereotyping. Do children relate with their own living experiences? In general, Shapiro found that children's comprehension of social goal material was good. One third were able to answer open-ended questions without prompting. Another third were able to recognize answers in a multiple-choice situation. No striking differences were noted between male and female or black and white answers. All children were attentive to the program and seemed to enjoy watching it. Older children out-performed younger children on some questions, but inconsistently.

Walling, James L., "The Effects of Parental Interaction on Learning from Television," Communication Education 25:16-19, January, 1976.

This article pointed out that factors which influence socialization are important because of the indirect implication they have for later life. Children's perceptions and personalities are largely undeveloped and are more vulnerable to influences within their immediate environment. Results of this study showed that the medium of television or the act of viewing alone did not affect a child's learning or socialization. Instead, it identified the viewing condition as the key factor in determining effects, particularly in terms of degree of strength and retention of formal education via television. Parental interaction did not create learning from television, but it did increase and guide the potential learning which may be already taking place within the normal habits of the child. It was concluded that children did gain knowledge about certain aspects of socialization from the tube.

Pusser, H. Ellison, Coates, Brian, and Goodman, Irene, "The Influence of Sesame Street on Children's Social Behavior in the Pre-School," Child Development 47:138-144, March, 1976.

This study was designed to assess the influence of Sesame Street on behavior in the pre-school. This study used segments that were high in both positive reinforcement and punishment. In analyzing the results, it was found that Sesame Street increased the children's giving of positive reinforcement and punishment to, and social contacts with other children and adults in the pre-school. This was an extension of the Bogatz and Ball study made in 1970. These findings demonstrated that Sesame Street could influence behavior in the pre-school.

Anderson, Daniel R., Levin, Stephen R., and Lorch, Elizabeth, "The Effects of Program Pacing on the Behavior of Pre-School Children," AV Communication Review 25:159-166, Summer, 1977.

The fast pace of children's programs, particularly Sesame Street, has been criticized for causing hyperactivity, impulsivity, disorganized behavior, and short attention spans in pre-school children. This study examined the short term effects of program pacing on the behavior of young children. Three control groups were used, one watching fast paced programs, one watching slow paced programs and the third group was read to by parents. Immediately following viewing, measures of perserverance, attention, activity, impulsivity and constructiveness of play were taken. None of the analyses produced results consistent with the hypothesis that rapid television viewing increased any of the above mentioned behaviors. No support for any immediate effects of television pacing or negative impact was found. This author suggested that the effects suggested by critics must be very small, sublte, and/or cummulative over long periods of exposure and seemed insignificant in comparison to the benefits.

Silverman, L. Theresa and Sprafkin, Joyce N., "The Effects of Sesame Street's Pro-Social Spots on Cooperative Play Between Young Children," Journal of Broadcasting 24:135-147, Spring, 1980.

These authors stated that studies assessing the effects of pro-social television with pre-schoolers did no show consistent results. Their data suggested that the influences on pre-schoolers were neither as consistent nor as great as those found with older subjects. The positive effects of pro-social programming were neither as consistent nor as great as the negative effects found when pre-schoolers were exposed to anti-social material on television. In this particular study, pairs of children watched a short television program with spots taken from Sesame Street. They were observed while playing a game to assess cooperation between. The older the pair of children, the less likely they were to use the cooperative stratedy of taking turns.

CRITICAL EVALUATION

Negative Evaluation of the Program

Sedulus, "Sesame Street," New Republic 169:350, June 6, 1970.

This author rated Sesame Street as a television readiness program that was imaginative, tasteful, and witty. Sedulus felt, however, that it failed to let children see connections between the alphabet and reading. What it seemed to fail to realize was that some kids do not learn because of hunger, weariness, or fear. Most pre-schoolers could not see the point of the alphabet until they started to read. This author felt that a national crisis has been created by insistence that reading be started in the First Grade. Thus, by Sesame Street emphasizing school skills to the very young, it may have been making a bad situation, worse. Television was impersonal, and children were not afraid to fail. It demanded no answers. It did convince parents that children could learn a lot, but in a passive and sedentary manner, like in schools. Sesame Street has not taught things, only new ways to catagorize and rearrange old things. It has failed to provide challenges, has not evoked real emotions or real fantasy, and has been too grown-up initiated.

Kliger, Samuel, "Fog Over Sesame Street," Teachers College Record 72:41-56, September, 1970.

This article stated that the primary questions for Sesame Street in it efforts to produce massive infusions of language learning experience in the ghetto should not have been whether the mothers should correct a child's grammatical form, but rather what was the source of the error. This author felt that making Sesame Street enjoyable merely reinforced the child's desire to have fun and that learning (shaped behavior) did not begin until it was caused to happen. Learning should have been begun at the manipulative stage and gradually progressed to the abstract stage. This program failed to consider this. For learning to take place, there has had to have been an interaction and feedback from the environment. Kliger suggested that because Sesame Street was fresh, new and inventive, a higher degree of instructional sophistication should have been employed.

"Sesame Street - What Next?" Library Journal 95:3958-3961, November, 1970.

Sesame Street's approach to education has been criticized it its narrowness - it has cut learning up into smaller pieces to emphasize rote memorization and naming rather than concept expansion. The major goal of the program was to try and help the ghetto children with the enrichment that the middle class children get from their environment. References to actual concerted efforts to help disadvantaged children were virtually non-existent at this writing. Right answers were demanded and praised on the programs. The actual success of the program depended on continual reinforcement of presented concepts, especially to the disadvantaged children.

Sprigle, Herbert A., "Who Wants to Live on Sesame Street?" Childhood Education 49:159-165, December, 1972.

This study set out to find: 1) Did Sesame Street prepare children for First Grade? 2) Did the program narrow the gap (achievement) between lower socio-economic and middle class children? Sprigle set up conrol groups for periods of one and two years. On the Metropilitan Readiness Test, Sesame Street graduates scored lower. The introduction of a complete Sesame Street curriculum into Kindergarten had no long term effect on academic achievement of poverty children. No permanent educational benefits were derived from increased viewing time. On the program, adults talked 90 percent of the time, with communication adult-initiated and controlled. Children spoke only when spoken to, leading to passive and dependent on the teacher for learning. It was too structured and discouraged spontaneous expression of ideas and personal observations. Exposure to this program did not prepare children for school, not did it narrow the achievement gap, according to Sprigle. He stated that Sesame Street did so little for so many.

Ogletree, Earl, "Sesame Street - Too Tied to Cognition," Times Educational Supplement 2924:17, Chicago, June 4, 1973.

Ogletree felt that Sprigle's findings substantiated what every good primary teacher should have been aware of - the child as a whole should have been considered in the learning process. Learning was a motivational process - not a cognitive one, alone. The humanness was the essential foundation of motivation and an integral part of the learning process. This author felt that the program actually cost two to three cents per student, (not the one cent stated by the producers) and that it was too much to pay for a program that did not have the above mentioned elements.

Monahan, Anthony, "Sesame Street: A Changing Neighborhood," PTA Magazine 68:6-7, September, 1973.

As of this date, Sesame Street was seen in over 50 countries. After one year of airing, the Head Start Evaluation and Research Center called the program, "An educational mirage, straight memorization of numbers and letters, which Seseame Street does best. It was an absurd enterprise for an eight million dollar project". The report further maintained that understanding and reasoning were ignored on the program. Charges were also made that the content was too simple for its audience, that it emphasized the right answers, and was stereotypical. To acquire knowledge in a passive, uninvolved manner did not prepare children for real life. This author felt that the program format was far too removed from structured learning and that it nurtured irrelevance. Monahan claimed that later studies of the Educational Testing Service showed that once children entered school, they once again, fell behind.

Fowels, Jib, "Educational T.V.: Soon We May Discover That It Narrows, Not Broadens Learning," American School Board Journal 161:31, March, 1974.

Fowels felt that Sesame Street has offered children first and foremost, its warm presence. It has become one nice place to be. Education went one, but only secondarily. Children learned the alphabet because it was presented with kindness. There was another reason why they learned - children, especially young children, have had a need to learn and a willingness to tolerate schooling. Since Sesame Street, parents have begun to assume that their pre-schoolers needs to learn were being met, totally. Much of the personal responsibility for socialization, education, and exposure of children to real life experiences has been left up to the screen. This author has asked that parents reconsider the real benefits of Sesame Street.

Halpern, Werner, I., "Turned-On Toddlers," Journal of of Communication 25:66-70, Autumn, 1975.

Sesame Street may have been posing a threat to the very young by overloading their nervous systems with joved-up, repetitious auditory and visual sensations, according to this author. Piaget's school of thought was referred by Halpern. Paiget stated that the rate of development could not accelerate indefinitely without cognitive and educational growth jeopardization. Some youngster's were more sensitive to sensory overkill than others, and these were the children Halpern felt shows like Sesame Street have been harming.

Cook, Thomas D., and Others, Sesame Street Revisited, Educational Resources Information Center, ED 112 862, Russel Sage Foundation, New York, September, 1975. 410 pp.

Cook reevaluated the studies about how much the economically disadvantaged child had learned from Sesame Street and whether the program narrowed or widened the achievement gap between classes of children. Results indicated that learning had taken place as a result of viewing, but that gains could not be shown without encouragement to view taken into account. Studies also revealed that disadvantaged parents read less to their children and that the amount of time spent viewing depended on parent education and income. This research, however, was not designed to compare learning gains or possible achievements and differentiated learning gains from learning. Cook concluded that encouragement was needed for learning to occur and that Sesame Street had, in fact, widened the gap between economic classes of children.

Beck, Kay, "Piaget Does Not Live on Sesame Street," Educational Technology 17:16-19, July, 1977.

Beck stated that Sesame Street was not different from most schools, just different from most television programs. Piagetian Theory claimed that the child must act to learn - learn by doing. Sesame Street, according to Beck, did not allow for this but rather showed the child how to do something. No studies were undertaken by the Children's Television Workshop to determine what elements in a specific sequence elicited or stimulated behavior in the child. They did not measure audience in growth of logical thought, reasoning skills or knowledge of spatial and temporal concepts and tested only those gains that were easiest to detect. About one half of the specialists consulted agreed that a lack of language development in a disadvantaged child created a qualitative difference. Piaget emphasized operative (manipulative) knowledge while Sesame Street emphasized figurative (memorization) knowledge. This author felt that Piaget did not live in most classrooms either.

Holt, John, "Big Bird, Meet Dick and Jane," Atlantic Monthly 22:72-78, May, 1978.

Holt liked the dry, deadpan, ironic humor on the program, but felt that it was aimed too low and misunderstood the problem that it tried to cure. Poor and rich kids are more alike when they enter school than was commonly believed, claimed Holt. Head Start Programs or programs like Sesame Street could not change that. "Most of the time what is on the screen seems to be there only to catch or hold the child's attention," stated Holt, "to sweeten the learning pill." Some educators felt that the learning and instruction on the program was clumsy, misleading, and just plain wrong. Rarely did they show kids doing anything. The point derived from the program was trying to figure out what the teacher wanted. This author felt that real streets, real kids and not puppets, with real action should have been used. Criticism lied on the dwelling on school readiness and not on teaching about the world and surrounding people.

Cathey-Calvert, Carolyn, Sexism on Sesame Street: An Outdated Concept in a 'Progressive Program, Educational Resources Information Center, ED 122 824, Know, Incorporated, Pennsylvania, 1979, 15 pp.

This author randomly selected Sesame Street show #189 and scrutinized for evidence of sexism. It was found that a male dominated society was presented. The program featured only males doing enjoyable, worthwhile things. Males appeared twice as much as females. Males were portrayed as competent and domineering, while the female was shown as the weaker sex. Females were shown to be subservient, with no real role in society. Cathey-Calvert felt that the show's success of non-stereotyped minorities must be extended in its portrayal of women.

Singer, Jerome L., and Singer, Dorothy G., "Come Back, Mr. Rogers, Come Back," Psychology Today 12:56-60, March, 1979.

The Singers felt that Sesame Street not only shortened the attention span of young children but also inhibited their ability to reflect on and retain new information. They said that fast paced shows left little time for the responses and reflection that were important ingredients of such strategies. Behavior of nursery school children watching Sesame Street was compared to those wathing Mr. Rogers. Those watching Sesame Street kept their eyes glued to the screen, while the Mr. Rogers viewers allowed their eyes to wander away occasionally. When tested on recall-type questions, both groups did equally well. Those less intellectually gifted seemed to benefit more from Mr. Rogers. They showed an increase in their level of imaginative play and more positive emotional reactions to other children. The Singers felt that young children needed relatively simple material presented at a slow pace.

Evaluating the Research(ers)

Ingersoll, Gary M., "Sesame Street Can't Handle All the Traffic," Phi Delta Kappan 53:185-186, November, 1971.

The biggest asset of Sesame Street, Ingersoll felt, was that children were, apparently, learning. Bogatz and Ball (1970) gave the program high ratings, however, all their conclusion were based on analyses of gain scores and had a large component of measurement error. Critics of Sesame Street failed to consider what the program has done. Sprigle's control group was not really a control group in an experimental sense. He gave his own selected control group another but different concentrated instruction sequence which reflected his own biases. Bogatz and Ball used rather simple experimental design to test their hypothesis that Sesame Street was an effective agent in producing change. A pretest showed that higher scores yielded higher posttest scores. Smaller children learned more. Ingersoll felt that educators should not be lulled into tact acceptance of the series as the best one for the education of disadvantaged children.

Blanton, Bill, "How Effective Is Sesame Street?" The Reading Teacher 25:804-807, May, 1972.

Sesame Street was, undoubtedly successful. More important, however, were the positive results of the evaluations of the program. Not all observations of the program have been positive, however. Many educators have argued that a valuable number of objectives have been excluded from the series. Most criticism about the program, Blanton felt, has been subjective. If any evaluation of Sesame Street is to be legitimate, it has had to be made with the program's objectives in mind, not necessarily the objectives of the evaluators. The effectiveness of the program has been praised and questioned, sometimes with more passion and objectivity.

"Who Wants to Live on Sesame Street?" Science News 103:183, March 24, 1973.

This article comments on the criticisms of Sprigle and his contention that Sesame Street sacrificed education for entertainment. Sprigle's findings (1972) were not widely accepted and some educators questioned the validity of the tests used. Palmer said Sprigle misconstrued and misrepresented Sesame Street's mandate and objectives. Palmer also said that Sprigle's design and reporting were so flawed and virtually meaningless and invalid. Sprigle pitted Sesame Street against a comprehensive program of instruction (his own Kindergarten curriculum) a contest Sesame Street was never designed to enter. The program was never intended to be a substitute to the ultimate educational experiences between teacher and child. Sprigle's tests focused on five and six year olds and Sesame Street was designed for four year olds. Palmer stated that no program can narrow the gap between classes by itself, since all classes view it. Single never made reference to nationwide surveys that proved positive learning gains and refused to show his original researched when requested.

Moorsom, Sasha, "Sesame Street," Encounter 41:55-58, September, 1973.

Sesame Street has been attacked, despite of its backdrop of a crummy urban street, as being too middle classed and presenting too favorable a picture of this environment. This author, however, preferred its seting over the usual antiseptic nursery settings seen on so many children's programs. The close links with research made the program so effective. The debate about the importance of pre-school stimulus to children's learning surrounds Sesame Street. The pre-school years have been increasingly regarded as playing a vital part in the educational attainment of the child. One great advantage that this program had over other preschool programs was that it had a built-in appeal to adults and older children as well as younger children.

Zimiles, H., "News and Views of Research," Young Children 29:397-399, September, 1974.

Researchers Friedrich and Stein (1975) attempted to discover the effect of television's influence on youngsters. Tens of thousands of observation tallies, test scores, interview responses and background data seemed to indicate that only children from low socio-economic backgrounds showed gains in pro-social behavior, but these gains were short-lived and lasted only about two weeks. Zimilies felt that clear-cut findings, were few. Such studies were likely to uncover only those forms of influence that occurred consistently or were similar from child to child. The author felt that studies were needed to serve as an information basis, but that it seemed inappropriate for them to become the primary basis for policy of children's television programs.

Cohen, Dorothy, H., "Is T.V. a Pied Piper?" Young Children 30:4-14, November, 1974.

Some teachers of young children have disputed the miracle of Sesame Street as pointed out by this author. They reported that while some children did enter nursery school and Kindergarten recognizing numbers, and even reading, there was also a decrease in imaginative play and an increase in aimless running around, low frustration tolerance, poor persistence and confusion about reality vs. fantasy. Insufficient hard research made it impossible to link this with increased television viewing. It was not easy to determine behavior changes. Educational researchers do not always know what questions should have been asked, what the program's specific goals were, or children well enough. It seemed highly improbable that direct causal relationships could be found in the effect of an educational program, given current research techniques. This author feared that television images were replacing real people, real life experiences, and ware becoming a Pied Piper. Related forms of stimulation and reinforcement were a must for full benefit of television programming.

Cook, Thomas D., and Conner, Ross, "The Educational Impact," Journal of Communication 26:155-164, Spring, 1976.

A review of Bogatz and Ball's (1970) first evaluation of Sesame Street suggested that the variable needed specifying. Encouraged children viewed more heavily than non-encouraged children. This made it difficult to differentiate effects of viewing from effects of encouragement. In their second year, the analyses again suggested effectiveness in teaching, but effects were smaller in magnitide, no statistical test results were presented and the new tests still did not control for possible differences between viewing groups in their normal maturation rate. Cook found that non-viewers were inadvertently excluded from the analysis and no individual test results were presented. The generality of any possible effects of viewing Sesame Street were really not known. Cook felt, however, that it was probably one of the best evaluations of the effectiveness of the program to date.

Lesser, Gerald S., "Stop Picking on Big Bird," Psychology Today 12:56-60, March, 1979.

Lesser felt that children can be better served by providing a variety of styles in television for children. Little research evidence supports the claim that any possible negative effects of fast paced techniques outweigh the positive learning benefits. No evidence could be found that rapid television pacing had a negative effect on children's pre-school behavior. No reduction in sustained effort or increase in agression or unfocused hyperactivity could be found. The Singers (1979) failed to find evidence of shortened attention spans or decreased concentration. Sesame Street viewers increased in imaginativeness and positive interaction with adults. It also proved good at teaching inferences. The program deliberately used television to teach without hiding its educational intentions and yet attracted a large and devoted audience. "No one should assume that one style of television is best for all children," said Lesser. Sesame Street has been an example of one possible style.

SUMMARY

Research indicated that Sesame Street began as an experimental series based on a solid foundation of formative research. Its objective was to determine whether commercial television approaches and techniques could have been successfully adapted toteaching, as stated by Palmer. According to Little, a major goal was to hurdle geographic, ethnic, and poverty barriers and reach the disadvantaged child.

Tierney stated that the program's success formula has been one of pretest, posttest, modification en route, and in-depth learner analysis. The goals of the program have changed over the years and included affective as well as cognitive goals, in response to audience needs and summative research. According to Palmer, program format was used as a teaching tool which allowed children to deal with the show at their own levels. Hayward and Rosenthal suggested that some of the program ideas and techniques should have been adapted for classroom use.

Test results of Bogatz and Ball on the impact the program has had on learning revealed that: 1) disadvantaged children who watched the program a great deal surpassed, in academic gains, middle class children who watched the program infrequently, 2) the children who watched the program

the program the most, learned the most, and 3) the younger the child, the greater the gains, with three year olds making the greatest gains. Children from the Sesame Street generation have been coming to school knowing letters, numbers, body parts, and even reading. Their attitudes toward school, learning, and other races have been greatly enhanced. Program penetration studies indicated that children in ghetto communities benefited from the program and that it had become an institution to them.

Sproule's tests showed that children were anything but passive when they watched television. Behavior impact studies by Paulson indicated that television could influence immediate pro-social behavior in pre-school children. Freidrich and Stein found support for the prediction that children learned the pro-social content of television programs and generalized that learning to other situations. Shipiro discovered that children's comprehension of social material from the screen was good. Walling identified viewing conditions as the key factors in determining the effects on learning and socialization, with parental interaction playing an important role. Anderson found that fast program pacing had no immediate effect or negative impact on

the behavior of the pre-school child.

However, not all research favored Sesame Street. The critics performed a valuable service by reminding producers that Sesame Street attempted and succeeded in achieving a rather narrow set of objectives. Sedulus claimed that Sesame Street failed to let children see connections between the alphabet and reading. Sprigle disputed evidence that children who watched Sesame Street made learning gains above those who did not watch it. Exposure to the program did not prepare children for First Grade, according to Sprigle, nor did it narrow the achievement gap between the disadvantaged and advantaged child. Monahan felt that the program format was too far removed from structured learning and nurtured irrelevance. Fowels feared that parents were leaving too much personal responsibility for socialization and education up to the screen. Beck stated that while Piaget emphasized operative (manipulative) knowledge, Sesame Street emphasized figurative (memorization) knowledge and that active participation was necessary for learning to occur.

The research has been scrutinized by many. Ingersoll pointed out that flaws existed in the Bogatz and Ball and the Sprigle research methods. Most of the criticism of the program has been subjective, stated Blanton, and

should have been made with the objectives of the producers in mind and not necessarily the objectives of the evaluators. Zimilies suggested that no clear-cut findings were found for the influence of television on pro-social behavior. Finally, Lesser stated that there was little research evidence that supported claims of negative effects of viewing Sesame Street.

CONCLUSIONS

It was concluded that Sesame Street had successfully adapted commercial television approaches and techniques to teaching and had hurdled geographic, ethnic, and poverty barriers to reach the disadvantaged child.

Cooney, Palmer, Rogers, Little and Tierney concluded that the program format and flexible objectives and expanded goals helped to make it one of the most successful children's television programs in history. The right balance of content, appeal, and motivation boosted its success story and proved its ability to educate.

The show increased awareness in educators and parents of children's mental capabilities. Hayward and Rosenthal concluded that some of the program sequences spurred ideas of what and how to teach children.

It was also concluded from studies by Bogatz and Ball, and others, that the program enhanced the intellectual development, invited active participation, and increased positive attitudes about learning and social behavior. Walling concluded that parental interaction played an important part in reinforcing positive factors.

Critics helped draw conclusions that educators should not be lulled into tact acceptance that the program was the

best for the education of disadvantaged children and that research should have only served as an information basis when making policy decisions about children's television.

Lesser concluded that no one should have assumed that one style of television programming was best for all children and that Sesame Street was just one style that proved to be a positive force in the lives of pre-schoolers.

RECOMMENDATIONS

It is recommended that:

1) Sesame Street be looked upon as a model of creativity and innovation. It broke the ground for educational programming and help stimulate new thinking about public television and its use in education.

2) Sesame Street be considered an important factor in helping the pre-schooler adjust to the world around him/her.

3) Parents and teachers use television as a positive educational tool to complement and supplement a child's formal education.

4) Parents and teachers continuously examine television programs and interact with children during viewing.

5) Parents and teachers focus attention on how television can enhance desirable effects, enrich learning, and add positive behavior in the lives of our children.

6) Television producers, educators, and parents work toward the same goals of reinforcing and building upon television's contributions to education.

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